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ABSTRACT

This brief statement of policy and proposed action by the regents of The University of the State of New York covers a wide variety of situations from the high school graduate who requires additional occupational training in noncollegiate institutions to the secondary school student who is headed for college and graduate school. A discussion of the problems of discontinuity is presented, followed by a description of potential forces for change. Four broad goals of the regents are listed, and their recommendations are outlined and broken down into six areas of concern. In order to implement these recommendations fully, action needs to be taken at the local, regional, and state levels. The statement concludes that the articulation process is never completed. Review and revision of procedures, reorientation of personnel, and continuing communication between sectors of the educational system are all necessary for the success of the articulation program. (Author/BW)

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THE ARTICULATION OF SECONDARY AND POSTSECONDARY EDUCATION

A Statement of Policy
and Proposed Action
by the
REGENTS OF THE
UNIVERSITY OF THE
STATE OF NEW YORK

THE STATE EDUCATION DEPARTMENT
ALBANY
AUGUST, 1974

THE UNIVERSITY OF THE STATE OF NEW YORK

Regents of The University *(with years when terms expire)*

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FOREWORD

New York State is committed both to responding to the educational needs of all students and to increasing the overall efficiency and effectiveness of the State's system of education. As postsecondary education has become characterized by nearly universal access and as costs have risen, the needs for increased options and structural flexibility have become more pressing. This is true not only in postsecondary education itself but also in the relatively neglected but critical area of secondary/postsecondary school articulation.

This topic covers a wide variety of situations from the high school graduate who requires additional occupational training in noncollegiate institutions to the secondary school student who is headed for a long period of collegiate and graduate school training. It also is concerned with the quality and enrichment of the individual's education — not just the acceleration of obtaining credentials. An issue of this breadth obviously touches upon a number of other educational issues that are worthy of separate treatment. It would be useful, for example, to read Regents Position Papers on continuing education and occupational education as well as my recent paper on optional learning environments in connection with this discussion of articulation practices.

I join with the Regents in urging that all the institutions and groups concerned with the transition from high school to postsecondary education give careful consideration to the matters discussed in this Position Paper and to the recommendations it contains.

Ewald B. Nyquist

President of the University and
Commissioner of Education

August 1974

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I. INTRODUCTION: THE PROBLEM OF DISCONTINUITY

High schools and colleges have developed as relatively self-contained systems. A division into lower and higher education has come to seem perfectly natural. Countless practices are based upon and reinforce this division. Different credentials and training are expected of teachers in the two sectors; separate professional organizations exist for each group; funding patterns and formulas differ; and completion of the 12th grade curriculum is generally prerequisite for entry into postsecondary institutions. High schools and colleges are often characterized by major differences in style and ethos.

The two systems do interact. The secondary schools prepare students for postsecondary education. The colleges and universities in turn prepare virtually all the professional personnel in elementary and secondary schools; some of the faculty of colleges prepare educational materials used in the schools; the universities and colleges engage in research on the best practices in elementary-secondary education; and high school guidance counselors and college admission personnel constitute a formal professional linkage between the two sectors of education. Yet, efforts at effective articulation for the student have been too often inadequate, and both individual students and the society itself have borne heavy societal and economic costs for inadequate coordination between school and college.

The long-standing need for a more effective continuum of learning and more educational options for students has been made more important by the emergence of "universal access" postsecondary education and the development of a "learning society." About 65 percent of New York's high school graduates now go on directly to some form of postsecondary education. Within the traditional collegiate structure the demands of an emerging learning society have resulted in new adult constituencies and the development of new complexities in the articulation of diverse prior educational experiences with institutional curricula. Moreover, the problem is no longer the traditional one of the meshing of the high school and collegiate systems. In addition to the 215 colleges and universities in New York State there are 299 private occupational schools and 46 private business schools licensed by the State. Home study institutions are also burgeoning. The 34 licensed correspondence schools in the State reported enrollments of over 225,000. Clearly, the problem of articulation between types of institutions and levels of institutions has vastly increased in scale and complexity.

Thus, at the same time new and improved patterns of relationship between high schools and colleges are necessary, there are even broader social changes leading us into a society which is comprehensively committed to

lifetime learning. This is an era in which learning will be at or near the center of activity for a substantial portion of most individuals' lives and will have direct influence on many functions of society. This state of society requires a rethinking of all former relationships and a recognition that each secondary, collegiate, and noncollegiate postsecondary educational institution be considered part of a single organism. It may be useful for each component of this body to concentrate upon certain services for which it had unique capabilities, but many of the issues and human needs do not lend themselves to segmental treatment and will require imaginative and energetic cooperative efforts. The following section outlines some of these issues and needs.

II. FORCES FOR CHANGE

A wide range of conditions indicates the need for new ways of thinking about, organizing, and conducting the educational enterprise so as to respond more effectively to learners at the interface of secondary and postsecondary education.

1. Many young people are physically, socially, and intellectually more advanced today than their parents were at the same age. Professor Kenneth Kenniston at Yale reports that:

> "Since the turn of the century, the average amount of education received by each student group has increased by approximately one year per decade. Also, the average age for the onset of puberty has decreased by approximately one-fifth of a year per decade. Finally, the average student of a given age today appears to score approximately one standard deviation above the average student of the same age a generation ago on most standardized measures of intellectual performance. A student in the middle of his class today would probably have stood in approximately the top 15 percent a generation ago...Translated into individual terms, this means that the average 16-year old of today, compared with the 16-year old of 1920, would probably have reached puberty one year earlier, have received...more education, and be performing intellectually at the same level as a 17- or 18-year-old in 1920." [1]

Recognition of this earlier maturing has been acknowledged in some ways, such as by liberalization of parietal rules in postsecondary education, expanded student participation in governing boards of institutions and school systems and, more broadly, by reduction of the voting age to 18. However, the educational system has not fully adjusted to these changes. Clearly, curriculum modifications are necessary in some schools and colleges to respond to this more rapid maturing. In addition, the tendency to defer adult responsibilities, rights, and prerogatives several years longer by

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[1] Kenniston, Kenneth, "What's Bugging the Students," *Educational Record*, Spring 1970, p. 118. All young people are not equally advanced, however, as indicated by the reported decline in the Educational Testing Services, Scholastic Aptitude Test Scores.

extending formal education at the same time people are maturing at an earlier age calls for responses that include more varied and flexible learning structures, including more student options to "stop-out" of formal education and to change educational directions.

2. Some studies suggest that the division of secondary and postsecondary education at the student age of 17 or 18 may not meet the emotional as well as the academic needs of some students as well as may other structures. There appear to be similarities among young people 16 through 19 that set them apart from most individuals who are either two years younger or two years or more older. Many members of this grouping, which is sometimes described as late adolescence, are mature in their mental processes but have not yet achieved a well-organized ego or distinct life plans. They have mastered what is termed the last step of childhood and are able to think about their thoughts, to construct ideals, and to reason realistically about the future. The late adolescent period is a critical time to develop a sense of personal identity, of achievement, and of self-esteem. There is a need for tentative but real engagements in the adult world. It is a time for persons to test themselves and their society in search of meaningful lives and careers.

Educational institutions at all levels need to consider the implications of these views for their programs and educational style. Such findings clearly suggest more opportunities for stop-outs in the formal educational process to engage in work or other activities. These considerations may also suggest that we need more varied educational groupings, including what are called Middle or Intermediate Colleges that will focus on the 11th through 14th grade levels.

3. Overlapping curricula in colleges and high schools often waste time and fail to challenge many young people. Numerous authors have noted that in many instances it is difficult, if not impossible, to distinguish the objectives and methods of instruction used in secondary schools from those used in colleges. More serious is the unnecessary overlapping of course content at various levels of education. This situation is not new, but persistent. According to a 1971 study by B. Everard Blanchard, liberal arts colleges were repeating about 40 percent of the content of high school courses in the social sciences, 35 percent in English, 24 percent in science and 21 percent in mathematics.[2]

While some repetition may be desirable, these percentages raise serious questions, particularly in the social sciences and humanities. Who decides what should be repeated and for what purpose? Are institutions and instructors even aware of this duplication? These data suggest the need for intensive investigation of the curriculum overlap in the educational institutions of

[2] B. Everard Blanchard, "Curriculum Articulation Between the College of Liberal Arts and the Secondary School" (unpublished, DePaul University, School of Education), Spring 1971.

New York State. Postsecondary institutions clearly should have enough flexibility in curriculums and enough student options to eliminate unnecessary duplication and to respond more effectively to individual learning needs and readiness.

4. Many high schools have fostered in students more independence, self-direction, and intellectual maturity than formerly. For example, many students complete all or almost all of the high school graduation requirements by the end of the junior year. Some of these students can "coast" during the senior year, particularly after college acceptances are received, or they may take advanced placement courses in a variety of subjects. The range of regular and advanced placement high school courses now includes subjects which were once considered the domain of college: calculus, psychology, sociology, economics and statistics. There have also been efforts in many schools to promote career education more effectively by drawing upon community resources and in some cases by involving students in field experience in job situations or actual gainful employment.

All these changes in the high school affect postsecondary institutions. They suggest the need for increasing flexibility in college admissions, substantial crediting of college-level work taken in high school, and more curricular options for students at the college level.

5. A new approach to education which measures results by student performance, no matter where or how the student learned, requires a different view of the function and relationship of educational sectors. This approach can be particularly useful to the academically talented and indeed to all students with specific knowledge in an area that can adequately be demonstrated by standardized testing or other evaluative means. This approach can broaden the base of learning from the classroom to the home or factory and can result in the crediting of appropriate noncollegiate educational experience and achievements. It can also reduce many of the unproductive debates over the level at which certain skills or knowledge should be classified. For example, whether basic foreign language work is high school or collegiate level should no longer be a major issue. The real questions are these: Is it necessary for the person's educational program, and can he demonstrate competency? The Regents are already supporting this approach by their External Degree Program and competency-based educational programs are still in their developmental phase and need to be both encouraged and closely monitored.

6. Secondary schools and postsecondary institutions both share the major pedagogical problems of teaching basic skills to students. Secondary schools have always faced this difficulty, but with the advent of liberalized or open admissions and universal access, public and private colleges are no longer partially shielded from this problem by restrictive admissions policies. The best minds and creative energies of both levels of education are

needed to meet successfully the challenge of insuring that all students have a mastery of such basic skills as reading, writing, and mathematics. The common responsibility for remediation calls for intensive coordination, including sharing of resources, faculty, and methods.

7. The widespread concern about inadequate teacher training and about the quality of teaching applies to colleges just as much as it does to elementary and secondary schools. The demand for competence-based certification for elementary and secondary education involving schools, colleges, and the community is a major response to this concern. At the college level, concern about the appropriateness of traditional training for college teaching has been expressed by the development of doctor of arts programs, by faculty development programs and by rising concern for evaluation of teaching effectiveness. There is also increasing interest in more effective teaching materials and in more effective use of instructional technology at both the secondary and postsecondary levels. These developments suggest the need for much expanded training of both secondary school and college teachers in response to the learning needs of students and for much increased contact and interchange between upper secondary school and college teachers.

8. Society has generated demands for educational services that overlap or fall between the traditional concerns of the secondary and collegiate sectors, notably demands for occupational education. This form of education once was a stepchild of our traditional education system. It lacked the prestige of academic programs. Demands for occupational programs change with the needs of business and industry, and the age groups served range from high school students preparing for the job market to adults who need "retooling." Responsibility for occupational education is dispersed among a variety of institutions, including high schools, Boards of Cooperative Educational Services, proprietary schools, industry, community colleges and other special postsecondary institutions with the result that there is often inadequate coordination for efficient student progression. There is a clear need for better student guidance and for articulation of all sectors to provide the necessary services and opportunities in this increasingly important field.

9. Adult education is another educational category that overlaps traditional sectors and has been neglected by many institutions. Recent research indicates, for example, that almost every adult undertakes a major learning project each year and some individuals engage in fifteen or more such projects per year. It is not uncommon for adults to spend 700 hours a year in such activity.[3] Both secondary and postsecondary institutions should give increased attention to responding to the learning needs of adults. This will

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[3] Tough, Allen, *The Adult's Learning Projects. A Fresh Approach to Theory and Practice in Adult Learning* (Ontario: Ontario Institute for Studies in Education), 1971.

involve complex problems of responding to the prior educational and life experiences of adults who wish to continue their academic and occupational education, usually on a part-time basis.

10. Finally, but importantly, the increasing cost of education both to students and their parents and to taxpayers compels improvement of articulation practices. The schools and the colleges have traditionally drawn on somewhat different sources of support. While high schools have drawn upon the local tax base and the State's local assistance budget, college resources are tuition, gifts, and funds from the State purposes budget. However, as resistance to increasing the percentage of the State budget committed to education grows, there is an increased tendency to view education as a single budgetary package and press for a more rational coordination of diverse elements.

One critical element in the financing of both sectors is the number of students enrolled, since State aid is generally based on enrollment and attendance. With the leveling off of the number of students entering high school and collegiate programs and the actual decline of enrollments in some institutions, the possibility for intense competition among the sectors for students grows. Without careful planning the quest for students could be destructive for both institutions and students.

This review thus suggests that the sharp compartmentalizations between school, college, non-collegiate postsecondary, academic, occupational, and technical areas should be modified. Indeed, as the discussion has indicated, changes in attitudes and practices are taking place that promise to alter and improve articulation among these sectors. A variety of changes presages increased flexibility and new patterns that may increase options for the learner and may, in some instances, reduce his time and cost commitments. For example, time-shortened degree programs have been created, collegiate work is being offered in high schools, early admission to colleges is expanding, proprietary schools offer degrees, competency-based approaches to certification are developing, nonclassroom routes to degrees are possible, and noncollegiate learning experiences are recognized. (See Appendix A for specific examples.) Those are an encouraging beginning, but further response and adjustment by all levels and sectors of education are necessary. The following sections of this paper outline the educational goals which effective articulation should further, and then set forth a series of recommendations for the improvement of articulation practices.

III. REGENTS GOALS

The following Regents goals can be furthered by improved policies and practices in the articulation of secondary/postsecondary education.

1. The educational system should meet the individual needs, talents, and aspirations of all learners. Not all sectors of the educational system can appropriately respond to all needs, but a well-coordinated system will facilitate the matching of the individual with the most appropriate resources.
2. The educational system must be comprehensive. It must contribute not only to intellectual, ethical, and aesthetic development but also to the occupational/vocational skills and needs of learners of all ages and backgrounds. These services must also be provided in time modules and in a manner that will maximize their availability.
3. The educational system should be efficient and effective in both fiscal and human terms. Unnecessary duplication, obstacles, and discontinuities waste scarce financial resources and the even more precious energies and talents of the citizenry.
4. Levels of quality and excellence in all aspects of education need to be maintained and strengthened. The press of quality applies to all fields from auto mechanics to medicine, and excellence should be judged from both the standpoint of the realization of the individual's talent and by standardized comparisons with others.

IV. REGENTS RECOMMENDATIONS

The following recommendations for improved articulation practices are organized into the categories of Guidance and Career Information; Curriculum Organization and Content; Admission and Transfer Policies; Competency and Achievement Testing; Sharing Faculty and Resources; and Occupational and Adult Education. These categories are a recognition of the fact that most articulation issues cannot be addressed to any one segment of the educational spectrum but need the cooperative response of secondary schools, colleges/universities, and noncollegiate postsecondary educational agencies.

The topical recommendations are followed by more specific suggestions to take the initiative at the local, regional and statewide level.

A. Guidance and Career Information

All educational institutions should make a major effort to provide students with comprehensive and detailed information about the range of educational opportunities, careers, and requirements.

1. Career guidance should begin at the elementary level, not in terms of seeking specific decisions, but expanding the range of possibilities and introducing the dignity and variety of the world of work.
2. Secondary school guidance should be more detailed and comprehensive. Information about the whole range of postsecondary

institutions and careers should be available. Counseling should include presentation of possible accelerated programs and other nontraditional options such as deferred admissions, time-flexible programs, external degrees, and work-study opportunities.

3. Collegiate institutions must also strengthen their guidance activities and provide better and more complete information about noncollegiate postsecondary options and experiences.
4. All postsecondary institutions should carefully assess the learning interests and competencies of the individual student in orientation and advisement sessions prior to or upon entrance to the institution and design a program responsive to those needs.
5. Postsecondary institutions should also make followup reports of student progress and outcomes to the institutions they previously attended, for the purpose of improving articulation and guidance.

B. Curriculum Organization and Content

This is the heartland of the educational enterprise and all sectors must critically scrutinize and revise their programs to avoid unnecessary repetition and duplication, enrich the learning experience, permit desirable acceleration, and expand the range of learning styles and modes.

1. Secondary schools should provide advanced courses and opportunities for the academically gifted. They should also expand the curriculum to meet diverse student needs by modules or minicourses, independent study, work experience integrated with a program of study, and increased use of instructional technology.
2. Schools should seek ways of minimizing the separation of students into 'college tracks' and 'noncollege tracks.' This latter practice is both highly restrictive of collegiate opportunities for the students in the noncollege track and inconsistent with a 65 percent college going rate for high school graduates in New York State.
3. Sound preparation and mastery of the basic skills of reading, writing, and mathematics are essential for all students in the elementary and secondary school. This is essential background for the transition not only to college but to success in all occupational and noncollegiate programs and careers.
4. The Regents encouragethe expanded use of the Equivalency High School Diploma. The Regents also encourage development of cooperative programs between schools, colleges and postsecondary institutions (See Appendix A.) Those student learning options might include:
   a. Development of time-flexible degree programs, including time-shortened programs based on a demonstrated student competency comparable to that of student norms in a conventional 4-year program.
   b. Development of academic programs that are integrated with work or with field experience and which appropriately evaluate and credit nonacademic experience in the context of curricular objectives.

c. Development of individually contracted programs that respond to well-defined and educationally acceptable intellectual or career objectives.
d. Development of curricula in which a student may rely heavily on instructional technology for self-education.

5. The Regents encourage postsecondary institutions to restructure their curricula, as may be needed, to reduce redundancy with secondary school curricula. Postsecondary institutions and faculty need to acquire greater familiarity with secondary school curricula and with the levels of achievement of their students in order to reduce repetition and establish a better integrated sequence of learning.
6. The Regents recognize arguments in favor of and opposed to the restructuring of the educational system into new units such as the 'middle' or 'intermediate' college which combines the last 2 years of high school and the first 2 years of college to serve the needs of persons in the 16-19 age group. The Regents will give close attention to any experimental efforts of this type.

C. Admission and Transfer Policies

Since institutional policies in these areas can be a major source of discontinuity, the Regents request all postsecondary establishments to review their admissions criteria and transfer policies and make whatever changes are necessary to facilitate initial enrollment, dropout, reentry, and transfer to or from another institution.

1. The Regents encourage institutions to make a full disclosure of admissions criteria, crediting practices, curriculum content and degree requirements to prospective students in their recruiting materials and catalogs. In particular, institutions are encouraged to state clearly and in detail their practices with respect to early admissions, deferred admissions, crediting practices for advanced placement tests and courses, and crediting practices for life experience. Institutions are also encouraged to include current student profiles (by high school quintile and aptitude test scores), predictive scales, achievement scores of advanced students on standardized tests, and statistical profiles of graduates.
2. The Regents encourage postsecondary institutions to review their admissions requirements and, aside from competence in basic skills, omit requirements of specialized courses that are not directly related to their own degree requirements. For example, the requirement of foreign language study for admission seems questionable unless it is an important element in the curricular design.
3. The Regents encourage postsecondary institutions to review their admissions requirements so as to seek out special potential student groups, including minorities and dropouts, who may not have had equal access.
4. The Regents encourage postsecondary institutions to examine their admissions procedures from the perspective of simplifying them for the prospective student and reducing unnecessary hurdles to admission. Simplified procedures might include the use of a common application form by institutions of a similar type, use of College Board or American College Testing Program

forms for biographical data, and use of admissions clearinghouses.

5. The Regents encourage institutions to have common admissions reply dates for students. The Regents believe that a student should not be pressed to accept an institution on the basis of the promptness with which his credentials were processed; he should not be required to respond to a tender of admission prior to action on his application for financial aid; and he should not be denied admission because financial aid is unavailable.
6. The Regents encourage postsecondary institutions, in cooperation with the secondary schools, to provide challenging opportunities for high school students who have demonstrated intellectual and social maturity. These opportunities might include early admission to college, collegiate-level work offered in the high school, or other means of providing advanced work.
7. The Regents encourage postsecondary institutions to adopt time-flexible or deferred admissions plans to promote opportunities for student self-development through employment or other activities between periods of formal schooling. Postsecondary institutions are also encouraged to allow reasonable discontinuity and "stopouts" in student learning without penalty after matriculation as a means of responding to students' developmental and learning needs.

D. Competency and Achievement Testing

The Regents support the expanded use of competency testing to determine achievement in lieu of a formal course, to validate learning that has occurred in an organized course of study, and to control the quality of licensed occupations and professions.

1. Secondary schools are encouraged to consider the expanded use of competency and achievement tests to determine placement and progression, and to satisfy course and diploma requirements. Standardized tests such as CLEP or College Proficiency Examinations and local exams might provide the basis for granting both high school and collegiate credit. Whatever the mechanisms, all programs which substitute achievement tests for courses, must be carefully evaluated to assure comparability with appropriate norms.
2. Postsecondary institutions are also encouraged to award credit for the demonstrated competences and achievements of individual students. This may take a variety of forms, including:
   a. Pretesting of students in basic skills and placement in programs appropriate to their needs, including remedial classes if necessary.
   b. Awarding appropriate credit for examinations such as the Advanced Placement Tests of the College Entrance Examination Board, or New York State's College Proficiency Examinations. Many institutions should consider increasing the amount of credit awarded toward graduation for such examinations.
   c. Awarding credit for adults' validated noncollegiate experience that is appropriate to their course of study.
   d. Awarding credit for advanced placement courses.

3. Colleges, schools, and other educational agencies are currently engaged in the development of competency-based teacher certification. This will be a most useful process to help popularize the concept and provide greater sophistication in the implementation. It will also promote the cooperative efforts of these different educational sectors.

E. Sharing Faculty and Resources

Physical and human resources are scarce and expensive and the Regents recommend that they be shared whenever possible.

1. The interchange of and communication between the faculty and staff from different types and levels of educational institutions are essential for significant improvement in articulation. A number of approaches can be taken to promote the interchange process: short-term faculty exchanges; longer term joint appointments; team teaching; special lectures or mini-courses by guest educators; workshops on topics of common interest; joint research projects or the preparation of teaching material; or teaching in special "bridge" programs which involve a mixture of secondary and postsecondary study. There can be several benefits from these interactions. Most important the individual faculty member can gain a greater appreciation and sensitivity for the strengths and problems of learners and educators in a different sector of the educational system.
2. Increased cooperative use should be made of physical resources such as libraries, special athletic facilities, computers, and residence halls. In many cases it is wasteful or impossible for each institution to be self-sufficient while others have underutilized facilities. Cooperation at this level may also provide a good beginning for more substantial educational interchange.

F. Occupational and Continuing Education

These important topics are given special treatment in separate Regents position papers but because they are both areas that tend to overlap the traditional divisions of education and are therefore frequently neglected, the Regents recommend that all educational institutions make special efforts to strengthen their capability to meet the occupational and continuing education needs of countless individuals of all ages.

V. IMPLEMENTATION

As a means of realizing a better articulated education system and implementing the recommendations in this paper, action needs to be taken at the local, regional, and statewide level.

1. At the local level each educational institution is asked to designate the responsibility for providing leadership to improving articulation practices. An existing office or committee(s) may be given the responsibility or in some cases a special new position or committee may be desirable. The designated group should take the initiative in reviewing institutional practices in the light of this position paper and recommending necessary institutional changes. A second responsibility would be to survey the educational resources of the area and seek improved communication and relationships.

2. On the regional level the Regents encourage the development of coordinated articulation policies and practices. This should be effected in part through joint efforts of existing or new consortia of secondary and postsecondary institutions. Boards of Cooperative Educational Services at the secondary level and the Regents Regional Advisory Councils at the postsecondary level might engage in joint projects in school-college articulation, for example. One important grouping at the regional level might consist of BOCES units and the 2-year colleges engaged in occupational education. In some areas of articulation, new groups or committees may be necessary or membership may have to be expanded. For example, mixed secondary/postsecondary faculty groups would be an important mechanism for studying the problems of curricular overlap.
3. At the Statewide level, the Regents will establish a task force of appropriate personnel from schools, colleges, other agencies and the general public to provide leadership and policy guidance in the general area of more effective secondary/postsecondary articulation for students and to recommend measures for the increased overall efficiency in the use of public and private resources. Substantive areas of concern will include:
    a. Bringing the fiscal implications of improved articulation practices to the attention of administrative and legislative units charged with the responsibility of studying the financing of education;
    b. Reviewing guidelines for the granting of credit for advanced study or competence;
    c. Developing guidelines for the increased sharing of students, faculty, and facilities by secondary and postsecondary institutions;
    d. Making recommendations for the improved articulation of secondary and postsecondary curricula and programs;
    e. Recommending actions for procedures and criteria for the assessment of programs in school-college articulation in terms of their educational effectiveness and efficiency.

In the execution of these responsibilities, the State Education Department will (a) sponsor research and the collection of data on this critical subject and prepare an inventory and analysis of current and planned articulation practices, (b) examine existing laws, regulations and guidelines pertaining to school-college articulation and recommend or make needed changes, as appropriate, and provide staff for the task force in its examination of the substantive concerns cited above, (c) sponsor regional and statewide conferences and workshops on school-college articulation in connection with the concerns of the task force.

On the statewide and national level it is also desirable to call these articulation problems to the attention of professional and disciplinary associations. A few groups such as the New York State Personnel and Guidance Association already have addressed the issue. The association of physics teachers, whose members come from all levels and types of institutions including the secondary schools, have also been actively at work to

prevent and eliminate harmful discontinuities. Most other professional groups have restricted membership to only one segment of the educational system and have not yet recognized or dealt with the implications and difficulties described in this paper. The Regents hope that many professional organizations and associations will give increased attention to this critical area.

CONCLUSION

Much is being done in New York State to improve the responsiveness of the educational system to the goals of meeting individuals needs, providing comprehensive opportunities, achieving efficient use of resources, and strengthening the quality of programs. The process of facilitating the individual's utilization of all resources that can contribute to his or her development calls for the creation and improvement of a systematic interdependence of the elements and activities that influence such progress.

This articulation process, as in any enterprise, is never finished. Agreements and procedures need review and revision. New personnel need orientation. Communication between sectors of the educational system must be established and kept open. Educators must resist the temptation to see their own small segment of the educational field as of primary importance while deprecating those who toil in other areas of the learning enterprise.

This paper has described the need and importance of improved articulation practices, it has made recommendations for areas that need special attention, and it has suggested several levels of action. The Regents believe that the recommendations set forth in this position paper should be implemented, as appropriate, by governing boards and educators in the schools, colleges, and postsecondary institutions of the State, and they pledge their support for such endeavors.

APPENDIX A

Examples of Educational Articulation

The following models describe programs that are currently in operation or about to be instituted by New York State institutions. They illustrate efforts to respond to the changing conditions and needs of learners described in this paper and suggest practices that might be adopted on a wider scale.

Example 1 — A publicly financed secondary school education center in New York City enrolls volunteer students in an educational program that uses cultural institutions, businesses, and urban agencies as well as academic institutions.

Example 2 — A college and high school have developed a first-year college program for a selected group of high school

seniors. The courses are taught in the high school by college faculty. The program results in high school graduation and a complete year of college credit while allowing students to continue their peer associations in the school.

Example 3 — Several high schools and a college in the same region have developed a 3-1-3 program. The critical middle year is a combination of the senior year in high school and the freshman year in college. During this year the students take half their work in high school courses that also carry college credit and the other half at the college in courses that also carry high school credit. The result is similar to Example 2 — high school graduation and a year of college credit.

Example 4 — A university has developed a cooperative program with a large number of high schools to offer one to five courses in the schools that will carry college credit. The courses and examinations are designed by the college faculty, but the teaching is done in the high schools by secondary school faculty who have had special preparation by the college. These courses are also open to students who do not wish college credit.

Example 5 — A college offers summer session credit courses for students who have completed the junior year in high school. If they are successful and wish to enter the college as freshmen that fall, they may do so or they may decide to return to finish the senior year in high school with some college credit that can be used in the future. This program provides both the student and the college with an opportunity to explore each other before making major commitments.

Example 6 — A special center with an interdisciplinary focus has been established by a university for selected students who have completed the junior year of high school. This "bridge" type program offers the opportunity for young people to have a somewhat special and protective academic and social atmosphere while also having access to the library, cultural, and intellectual resources of a university.

Example 7 — A university has developed an audio cassette course in music that can be rented by any high school. If the students achieve a certificate of proficiency, they may receive college credit.

Example 8 — Two agricultural and technical colleges now have programs in cooperation with high schools that allow students to enter after the junior year of high school. This permits

students to obtain the associate degree one year earlier than normal and also receive a high school diploma.

Example 9 — Three-year baccalaureate programs are now available in at least two public and two private colleges in the State. Although they vary in some program details, they all require about 90 credit hours of study at the institution. They are not an acceleration of the normal 120 credit hour program by overload schedules and summer session work. Some of these institutions enroll several hundred students in their time-shortened programs while others only have one or two dozen. The programs are based on factors such as the curricular overlap between school and college and different systems of validation are employed.

Example 10 — Another approach has been taken by a collegiate institution which has divided its program into freshman, middle, and baccalaureate levels. The first year consists of tutorials and bidisciplinary work. The middle period of specialized study may be of 1 to 3 years' duration and may entail off-campus study. The final, "baccalaureate year" requires bidisciplinary seminars, a colloquium, and a major essay. This time-variable program thus allows students a range of 3 to 5 years to complete the baccalaureate and allows him greater freedom to develop according to his own learning needs.

Example 11 — A community college has developed a plan for a "middle college" that will include the last 3 years of high school with the first 2 years of college. It is possible that some students might use this opportunity to reduce the time needed to obtain the associate degree, but another major objective is to provide early special attention for some students who can thus avoid the need for remediation in the 13th and 14th grades.

Example 12 — Specialized high schools that are linked to other sectors of the educational world are developing. There is a high school for the engineering professions in Seattle and one for the health professions in Houston. A New York institution is developing plans for a grade 10 through 12 school in the criminal justice field.

Example 13 — A baccalaureate college, community college, and high school have developed a cooperative program that allows the student to take certain courses in high school that will be accepted for advanced placement and credit in the colleges. This is an example of tri-level cooperation.

Example 14 — An Articulation Center for Occupational Education, covering a seven county area has been established. It has already made a survey of the need for and resources for such education and seeks to promote postsecondary occupational training programs closely and carefully articulated with high schools and BOCES occupational courses and programs.

Example 15 — A community college and local BOCES center planned and implemented a joint program that facilitates the further training of students who complete BOCES programs in areas such as licensed practical nursing. The cooperative project also seeks to provide additional educational opportunities for adults.

Example 16 — A private university has developed an educational concept that allows professional schools to create cooperative academic arrangements with business, industrial, professional associations, and governmental agencies in their respective fields of endeavor. A key element of the plan is the conversion to academic credit of the knowledge and skills acquired through on-the-job training, in-plant courses and programs, and military educational experiences.

Example 17 — A regional learning service in an 11-county area has been established to encourage the development of cooperative programs between schools and colleges. An External High School Diploma will be offered and the necessary resources and counseling for its achievement provided.

Additional information on these examples may be obtained through the Division of Academic Program Review, New York State Education Department, Albany, New York 12210.

Information on other examples is welcomed. Please address such information to the same office.

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